Amendments to the Specification:

Please replace the paragraph beginning at page 1, line 18, with the following revised paragraph:

~~Generally~~Therefore, image data is coded and compressed for ~~being~~ recorde~~d~~ing in the optical disk ~~therefore~~.

Please replace the paragraph spanning pages 1 and 2 with the following revised paragraph:

However, as described above, if the decoding unit is configured by hardware units, it becomes harder to update/improve the decoding unit in accordance with ~~to~~ an advance of the decoding technology. Thus, it could be considered that the decoding means is programmed and configured by software means so that it can be reprogrammed anytime. However, if the whole decoding unit is configured by software means, its processing time tends to increase as compared with one configured by hardware units, generally.

Please replace the paragraph beginning at page 2, line 11, with the following revised paragraph:

On the other hand, the compressed data must be decoded (expanded) from the optical disk ~~during~~while the game is executed and enjoyed by a user. Then, the required time for decoding (expanding) the compressed data becomes a critical matter and real time processing is demanded.

Please replace the paragraph beginning at page 3, line 12, with the following revised paragraph:

Further, in the method for decoding the compressed image data according to the first aspect, the step of recording the program data, which can perform partial decoding, in the memory of the electronic device when the optical disk is loaded in the electronic device may include the step of recording the program data ~~temporally~~temporarily in the memory card, which is an auxiliary recording device removably installed in the electronic device, and then recording the program data having been recorded in the memory card in a main memory within the electronic device ~~then~~.

Please replace the paragraph beginning at page 3, line 19, with the following revised paragraph:

Further, in the method for decoding the compressed image data according to the first aspect, the step of recording the program data, which can perform partial decoding, in the memory of the electronic device when the optical disk is loaded in the electronic device may include the step of recording the program data in a ROM, which is provided in the electronic device and can be written to at least once. The ROM, which can be written to at least once, is preferably a flash memory.

Please replace the paragraph spanning pages 3 and 4 with the following revised paragraph:

Further, in the method for decoding the compressed image data according to the first aspect, the step of recording the program data, which can perform partial decoding, in the memory of the electronic device when the optical disk is loaded in the electronic device may include the step of recording the program data in a ROM, which is provided in the electronic device and can be written to at least once, and then recording the program

data having been recorded in the ROM~~, which can be written at least once,~~ in the main memory within the electronic device. The ROM, which can be written to at least once, is preferably a flash memory.

Please replace the paragraph beginning at page 4, line 11, with the following revised paragraph:

Further, in the method for decoding the compressed image data according to the first aspect of the present invention, the electronic device is preferably a game device, and the compressed image data is preferably a game ~~device~~program.

Please replace the paragraph beginning at page 5, line 2, with the following revised paragraph:

An electronic device according to a second aspect of the present invention decodes compressed image data recorded in an optical disk. There is recorded in the optical disk in advance program data, which can perform partial decoding, ~~in advance,~~ in addition to the compressed image data. The electronic device includes at least an image decoder means for reading the compressed image data from the optical disk into the electronic device and decoding the compressed image data partially and a memory means for reading and recording program data, which can perform partial decoding, when the optical disk is loaded in the electronic device. The electronic device reads the compressed image data from the optical disk into the electronic device, uses the image decoder to decode the compressed image data partially, and further decodes, by the program data recorded in the memory in the electronic device, the compressed image data having been decoded partially.

Please replace the paragraph beginning at page 5, line 14, with the following revised paragraph:

The electronic device according to the second aspect of the present invention may further include a memory card, which is an auxiliary recording device installed removably in the electronic device. The electronic device reads and records program data, which is recorded in the optical disk and can perform partial decoding, into the memory card, reads the compressed image data from the optical disk into the electronic device, uses the image decoder to decode the compressed image data partially, and further decodes by the program data recorded in the memory card the compressed image data having been decoded partially.

Please replace the paragraph spanning pages 5 and 6 with the following revised paragraph:

The electronic device according to the second aspect of the present invention further includes a memory card, which is an auxiliary recording device installed removably in the electronic device. The electronic device reads and temporarily records ~~temporally~~the program data, which is recorded in the optical disk and can perform partial decoding, into the memory card and further reads and records the program data recorded in the memory card into a main memory within the electronic device, reads the compressed image data from the optical disk into the electronic device, uses the image decoder to decode the compressed image data partially, and further decodes, by ~~said~~the program data recorded in the main memory, the compressed image data having been decoded partially.

Please replace the paragraph beginning at page 6, line 5, with the following revised paragraph:

The electronic device according to the second aspect of the present invention further includes a ROM, which can be written to at least once, equipped in the electronic device, reads and records the program data, which is recorded in the optical disk and can perform partial decoding, into the ROM, ~~which can be written at least once,~~ reads the compressed image data from the optical disk into the electronic device, uses the image decoder to decode the compressed image data partially, and further decodes, by the program data recorded in the ROM, ~~which can be written at least once,~~ the compressed image data having been decoded partially.

Please replace the paragraph beginning at page 6, line 13, with the following revised paragraph:

The electronic device according to the second aspect of the present invention may further include a ROM, which can be written to at least once, and is equipped in the electronic device, reads and records the program data, which is recorded in the optical disk and can perform partial decoding, ~~temporally~~temporarily into the ROM, ~~which can be written at least once,~~ further reads and records the program data recorded in the ROM~~, which can be written at least once,~~ into a main memory within the electronic device, reads the compressed image data from the optical disk into the electronic device, uses the image decoder to decode the compressed image data partially, and further decodes, by the program data recorded in the main memory, the compressed image data having been decoded partially. The ROM~~, which can be written at least once,~~ is preferably a flash memory.

Please replace the paragraph beginning at page 7, line 17, with the following revised paragraph:

An auxiliary recording device according a third aspect of the present invention is installed removably in a device constituting an entertainment system. The auxiliary recording device reads ~~temporally~~ program data temporarily recorded in an optical disk loaded in the entertainment system and writes the program data into a main memory of the entertainment system. In this case, the program data having been written in the main memory cooperates with units provided in the entertainment system to perform a certain function on data read from the optical disk.

Please replace the paragraph beginning at page 8, line 8, with the following revised paragraph:

According to the present invention, in decoding compressed image data recorded in a recording ~~media~~medium (optical disk), partial decoding may be configured by software to allow future updates and improvements. Further, a partial decoding unit may be configured by hardware to achieve real-time processing.

Please replace the paragraph beginning at page 8, line 22, with the following revised paragraph:

FIG. 5 is a diagram used to explain an expanding (decoding) method based on MPEG 2, which is a typical example of the image compression technology;

Please replace the paragraph beginning at page 8, line 26, with the following revised paragraph:

FIG. 7 is a diagram for describing an image decoder for expanding (decoding) the compressed image described in FIG. 4 and the movement compensation program;

Please replace the paragraph beginning at page 9, line 14, with the following revised paragraph:

A preferred embodiment of the present invention will be described in detail with reference to the accompanying drawings. Identical reference numerals are used for indicating identical elements in the drawings, respectively, and repeated descriptions for the same elements will be omitted here.

Please replace the paragraph beginning at page 10, line 12, with the following revised paragraph:

The CPU 51 executes an operating system stored in the ROM 54 to control the entire video game device 1 and includes a 128-bit reduced instruction set computer-CPU (RISC-CPU), for example.

Please replace the paragraph beginning at page 11, line 2, with the following revised paragraph:

The GTE 61 has a parallel operati~~on~~ng system for executing a plurality of operations in parallel and functions as a co-processor, which can perform~~-~~, at high speed, coordinate conversion, light source calculation, and computation of a matrix or a vector based on a computing request from the above-described CPU 51. Thus, in this video game device 1, loads on the CPU 51 are reduced and processing including high-speed coordinate computation can be performed.

Please replace the paragraph beginning at page 11, line 13, with the following revised paragraph:

The above-described frame buffer 63 has a dual port RAM and can simultaneously perform drawing by the GPU 62 or data transfer from the main memory 53 and reading of data for display. The frame butter 63 has a capacity of several M bites, for example, and data stored therein is dealt with as data of a matrix configured by 1024 pixels in width by 512 pixels in length in which a pixel data has 16 bits. The frame buffer 63 is also provided with a display region whose data is to be output as a video output as well as a color look up table (CLUT) region, which stores a CLUT to be referred to when the GPU 62 draws a polygon and the like, and a texture region which stores a texture to be coordinate-converted during drawing and inserted in the polygon and the like drawn by the GPU 62. These CLUT and texture regions are changed dynamically based on a change in the display region.

Please replace the paragraph beginning at page 12, line 1, with the following revised paragraph:

As will be described later on, the image decoder 64, under the control of the CPU 51, partially decodes image data of a still picture or a moving picture stored in the main memory 53 and stores them in the main memory 53.

Please replace the paragraph beginning at page 12, line 19, with the following revised paragraph:

The optical disk control unit 80 includes a disk drive for driving the optical disk 81 used for reproducing a program, data and the like recorded in the optical disk 81, a decoder 82 for

decoding the program, the data and the like recorded with an error correction code (ECC), for example, and a buffer 83 for storing data from the optical disk 81 ~~temporally~~temporarily to allow high-speed data readout from the optical disk 81. A sub-CPU 84 is connected to the decoder 82.

Please replace the paragraph beginning at page 13, line 1, with the following revised paragraph:

As ADPCM data, audio data where difference of 16-bit digital data is represented and recorded in 4-bit is decoded in the decoder 82. Then, the data is supplied to the above-described SPU 71 and digital-analog converted in the SPU 71 to be used to drive the speaker 73~~ then~~.

Please replace the paragraph beginning at page 13, line 7, with the following revised paragraph:

Communication control unit 90 includes a communication controller 91 for controlling communication with the CPU 51 through the BUS. The communication controller 91 is equipped with a controller connection unit 9 to which the controller 20 for inputting an instruction from a user is connected and memory card inserte~~d~~ion portions 8A and 8B to which the memory card (auxiliary storage device) 10 and/or a portable electronic equipment 100 for storing setting data and the like of a game described later is connected.

Please replace the paragraph beginning at page 14, line 4, with the following revised paragraph:

Further, when setting data and the like of the game being executed must be stored, the CPU 51 sends data to be stored to

the communication controller 91, which writes the data from the CPU 51 into the memory card 10 inserted into a slot of the memory card insert~~ed~~ion portion 8A or 8B or the portable electronic device 100 (also with a function as a memory card). The memory card 10 or the portable electronic device 100 functions as an auxiliary memory medium (auxiliary memory device) removably attached to the video game device body ~~removably~~.

Please replace the paragraph beginning at page 15, line 13, with the following revised paragraph:

~~An~~The information content of an image, in particular~~,~~ of a moving image, is significantly large, and it is not practical to be accumulated as it is or used for communication. Since digital image information has values for luminance (brightness) and chromaticity (color information), they are compressed separately.

Please replace the paragraph beginning at page 15, line 17, with the following revised paragraph:

The information compression method uses, in combination, information compressions using intra-screen (spatial) correlation, inter-screen (time-serial) correlation, and a discrete code frequency when coding based on those methods (hybrid coding).

Please replace the paragraph spanning at page 18 and 19 with the following revised paragraph:

FIG. 4 is a diagram showing an MPEG 2 coding device schematically in terms of hardware. The coding device has a

discrete cosine transform (DCT) unit 105, a quantization unit 106 and a movement compensation unit 107.

Please replace the paragraph beginning at page 19, line 5, with the following revised paragraph:

In the quantization device 106, DC (direct current) and AC (alternating current) components of DCT coefficients obtained through the DCT operation are quantized independently. Among quantized DCT coefficients, a difference value is coded which uses a DC coefficient of an immediately previous block as a predictive value for the DC component while the AC component is coded after being re-aligned by zigzag scanning or the like within the block.

Please replace the paragraph beginning at page 19, line 24, with the following revised paragraph:

FIG. 5 is a diagram used to explain an overview of an MPEG 2 decoding device in terms of hardware. The decoding device includes a VLC decoder 101, an inverse quantization unit 102, an Inverse DCT (IDCT) unit 103 and a movement compensation unit 104.

Please replace the paragraph beginning at page 21, line 11, with the following revised paragraph:

As shown in FIG. 6, a movement compensation program 81p is recorded in a part of the recording space of the optical disk 81 purchased by a user.

Please replace the paragraph beginning at page 21, line 13, with the following revised paragraph:

In a first stage, the movement compensation program data 81p recorded in the optical disk 81 is transferred to the memory card 10 under the control of the CPU 51 in the entertainment system and is recorded as ~~a~~ movement compensation program data 81p'.

Please replace the paragraph beginning at page 21, line 17, with the following revised paragraph:

In a second stage, the movement compensation program data 81p' recorded in the memory card 10 is transferred to the main memory 53 under the control of the CPU 51 and is recorded as ~~a~~ movement compensation program data 81p".

Please replace the paragraph beginning at page 22, line 14, with the following revised paragraph:

Here, it may be possible that the movement compensation program data in the optical disk 81 is transferred to and written into the main memory 53 directly without being written in the memory card 10 ~~temporally~~temporarily. The memory card 10 removably installed ~~removably to~~in the entertainment system body is a recording medium where data can be recorded and deleted and game data can be recorded (saved) and read out (loaded), originally. That is, the memory card 10 is used for successively updating and recording data in the middle of a game. Thus, a vacant area in the memory card 10 can be used freely as memory which data can be recorded to and deleted from. Further, today, the memory card 10 is available in markets ~~in significantly~~at very low prices, and users can prepare several of such cards.

Please replace the paragraph spanning pages 22 and 23 with the following revised paragraph:

On the other hand, various data is intensely recorded in the main memory 53 when a game is activated, and the memory space becomes insufficient. Therefore, the movement compensation program data recorded in the optical disk 81 is transferred and temporarily recorded ~~temporally~~ in the memory card 10 and transferred and recorded into the main memory 53 when needed so that an insufficient memory space problem during the game activation can be handled easily.

Please replace the paragraph beginning at page 23, line 9, with the following revised paragraph:

FIG. 7 is a diagram showing decoding units for a compressed image of the entertainment system according to this embodiment. The image decoder 64 provided in the entertainment system includes the VLC decoder 101, the inverse-quantization unit 102 and the IDCT unit 103. They are preferably configured by hardware, but not limited to this. On the other hand, the movement compensation program is recorded in the main memory 53 or the memory card 10, as described with reference to FIG. 6.

Please replace the paragraph beginning at page 23, line 19, with the following revised paragraph:

Then, they are processed depending on image types (I picture, P picture, B picture) by the movement compensation program data 81p" transferred to the main memory 53 to obtain decoded images. However, if the movement compensation program is not transferred to the main memory 53 and is still stored in the memory card 10, it is used for the movement compensation

process. In another embodiment described later, if the movement compensation program is not transferred to the main memory 53 and is stored in the flash memory 55, it is used for the movement compensation process.

Please replace the paragraph beginning at page 25, line 16, with the following revised paragraph:

If the optical disk is not a DVD-VIDEO, an error message such as "This entertainment system can not play this optical disk" is displayed in the display device in a step S02. Here, the recording medium with the compressed image recorded may be any one of four kinds including CD-ROM for PLAY STATION, CD-ROM for Play Station 2, DVD-ROM for Play Station 2 and DVD-VIDEO, but excluding a CD-DA. Therefore, compressed images are reproduced as described next in four reproducing processes including the PLAY STATION game routine (S05), the Play Station 2 CD-ROM game routine (S07), the Play Station 2 DVD-ROM routine (S09) and the DVD-VIDEO playback routine (S11).

Please replace the paragraph beginning at page 26, line 5, with the following revised paragraph:

If the memory card 10 is inserted, in a step S21, it is determined whether the movement compensation program is recorded in the memory card 10 or not. If the movement compensation program has been recorded already, the procedure goes to a step S26 and goes to a routine for reproducing a program for compressed images recorded in the optical disk. The video program reproducing routine is one for a recording medium with compressed images recorded thereon, that is, either one of four kinds including CD-ROM for PLAY STATION, CD-ROM for Play Station 2, DVD-ROM for Play Station 2 and DVD-VIDEO, but excluding a CD-

DA. Of course, it does not prevent ~~from including~~the inclusion of other recording ~~mediums~~media achieved through future improvement.

Please replace the paragraph beginning at page 26, line 24, with the following revised paragraph:

Next, in a step S25, it is determined whether the movement compensation program data has completed ~~to be~~being written into the memory card 10. If it has not been completed~~ly written~~, writing in the step S24 continues.

Please replace the paragraph spanning pages 26 and 27 with the following revised paragraph:

If it has completed ~~to write~~writing the movement compensation program data into the memory card 10, the procedure goes to a step S26, where a reproducing routine for compressed image data recorded in the optical disk 81 is performed.

Please replace the paragraph beginning at page 27, line 22, with the following revised paragraph:

In a step S35, it is determined whether image data for one (1) GOP ~~is~~has been written into the main memory 53 or not. If it ~~does~~has not reached ~~to~~the image data for one GOP, the receiving of image data in the ~~S~~step S34 continues.

Please replace the paragraph beginning at page 28, line 4, with the following revised paragraph:

In a step S~~-~~38, it is determined whether all of the GOP constituting image data in the optical disk 81 is completely

processed or not, that is, whether all of the compressed image data is completely decoded or not. If it is not completed, processing in the steps S34 to S37 ~~—~~is repeatedly performed on image data for the next ~~one~~ GOP.

Please replace the paragraph beginning at page 28, line 9, with the following revised paragraph:

If all of the processing on the compressed image data is completed, the procedure terminates the routine for reproducing compressed images (step S26 in FIG. 9) and returns (RET) to the writing-to-memory-card ~~R~~routine and terminates.

Please replace the paragraph beginning at page 28, line 13, with the following revised paragraph:

It should be noted that while the example where the memory card 10 is installed in the communication control unit 90 is described in the above-described embodiment of the present invention, a ROM (see reference numeral 55 in FIG. 1, for example), rather than the memory card 10, which can be written to at least once, may be provided in the control system 50 and the movement compensation program data may be stored in the memory in the electronic device through the ROM.

Please replace the paragraph beginning at page 28, line 19, with the following revised paragraph:

As such a ROM, a flash memory or electrically erasable programmable read only memory (EEPROM) may be used. The ~~EERPM~~EEPROM is a ROM which can be rewritten any number of times and contents having been written are erased electrically by each one bite when being rewritten. The flash memory is a ROM, which

can be rewritten any number of times like the EEPROM and contents having been written are erased electrically by one operation or in blocks when rewritten. For a structure according to the present invention, the above-described flash memory may be preferably adopted.

Please replace the paragraph spanning pages 28 and 29 with the following revised paragraph:

It should be noted that a programmable ROM (PROM) which can be written to only once and an EPROM which can be written to any number of times and whose ~~data~~ written data can be erased by ultraviolet rays are known as the ROM which can be written to at least once in addition to the above-described EEPROM and flash memory. If either of ~~those~~the PROM and EPROM, which can be written to only once, is adopted, it is preferable that a socket or the like is equipped in the entertainment system body to achieve a structure where those semiconductor elements can be removably inserted.

Please replace the paragraph beginning at page 29, line 7, with the following revised paragraph:

Now, a writing routine and reproducing routine when the flash memory (reference numeral 55 in FIG. 1) is adopted will be described with reference to FIG. 11. The procedure for transferring and writing the movement compensation program recorded in the optical disk 81 to the flash memory 55 in the decoding process when the flash memory 55 is used is substantially the same as the flow for describing processes for transferring and ~~written~~writing the movement compensation program recorded in the optical disk 81 to the memory card 10 as shown in FIG. 9.

Please replace the paragraph beginning at page 29, line 14, with the following revised paragraph:

The above-described CPU 51 determines whether the flash memory 55 is installed into the above-described entertainment system body when the entertainment system is started up, for example, or not. If it is determined the flash memory 55 is installed, in a step S44, it is first determined whether the movement compensation program has already been recorded in the flash memory 55 or not ~~first~~. The step S41 corresponds to the step S21 in FIG. 9. If the movement compensation program has already been ~~already~~ recorded in the above-described flash memory 55, the procedure goes to a step S46 corresponding to the step S26 in FIG. 9. That is, it goes to the program reproducing routine for compressed image data recorded in the optical disk 81.

Please replace the paragraph beginning at page 30, line 6, with the following revised paragraph:

Next, in a step S45, it is determined whether the movement compensation program data has completed ~~to be~~being written into the flash memory 55. If it has not been complete~~d~~ly written, writing in the step S44 continues.

Please replace the paragraph beginning at page 30, line 9, with the following revised paragraph:

If it has completed ~~to write~~writing the movement compensation program data into the flash memory 55, the procedure goes to a step S46, where a reproducing routine for compressed image data recorded in the optical disk 81 is

performed, as shown in FIG. 10. Now, the reproducing routine in this case will be described briefly with reference to FIG. 12.

Please replace the paragraph beginning at page 31, line 3, with the following revised paragraph:

In a step S55, it is determined whether image data for one (1) GOP ~~is~~has been written into the main memory 53 or not. If it ~~does~~has not reached ~~to~~the image data for one GOP, the receiving of image data in the ~~S~~step S54 continues.

Please replace the paragraph beginning at page 31, line 12, with the following revised paragraph:

Finally, in a step S58, it is determined whether all of the GOP constituting image data in the optical disk 81 is completely processed or not, that is, whether all of the compressed image data is completely decoded or not. If it is not completed, processing in the steps S54 to S57 is repeatedly performed on image data for the next ~~one~~ GOP.

Please replace the paragraph beginning at page 31, line 17, with the following revised paragraph:

If all of the processing on the compressed image data is completed, the procedure terminates the routine for reproducing compressed images (step S46 in FIG. 11) and returns (RET) to the writing-to-flash-memory 55 routine (step S44 in FIG. 11) and terminates.